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REMARKS

Claims 2-6 and 23-25 stand rejected under 35 U.S.C. § 112, second paragraph. This rejection is respectfully traversed for the following reasons.

With respect to the language “or less” and “or greater,” it is respectfully submitted that the enclosed amendment obviates the alleged indefiniteness. With regard to the Examiner’s confusion regarding the relation between the first and second predetermined values, it is respectfully submitted that the Examiner appears to have misinterpreted the claims. Specifically, the first and second predetermined values simply define relative values at which the absolute value of an amount of change in the output signal can be.

For example, the first predetermined value can be set at 5 and the second predetermined value can be set at 10 so that the absolute value of an amount of change in the output signal can be maintained at or less than 5 for a first predetermined duration or longer (e.g., 5 seconds); *but thereafter*, the amount of change in the output signal can alter to the second predetermined value of 10 which can be larger than the first (claim 4). The Examiner asserts that “in claim 2 the absolute value is a first predetermined amount, then in claim 3 the first predetermined amount becomes a second predetermined amount ...” (emphasis added). However, contrary to the Examiner’s interpretation, the *first predetermined value* does NOT become the second predetermined value (the first and second predetermined values are simply reference points for the “amount of change”). Instead, the *absolute value of an amount of change* becomes at least the second predetermined value as recited in claim 3, for example. Such a varying change in the output signal between relative values (e.g., first and second predetermined values) is illustrated in Figure 2 of Applicant’s drawings.

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Regarding the Examiner's allegations related to "where exactly in the process the inflow is detected," it is respectfully submitted that the Examiner's objection is directed to claim *scope* rather than claim *definiteness*. As set forth in MPEP § 2173.04, claim breadth is not indefiniteness. In the instant case, the inflow detection can take place at any time during step (b). Applicant is not required to recite a specific process for carrying out the method to satisfy the requirements under § 112. Such considerations should instead be reviewed under § 102 and 103.

Indeed, it is submitted that the claims are definite in that an output signal corresponding to the detected transmitted light component, scattered light component and/or reflected light component of a light can change among various relative reference values (e.g., first/second predetermined values, etc.) depending on the light interaction with the solution surface, as explained in Applicant's specification with respect to Figure 2 of Applicant's drawings.

In view of the foregoing, it is respectfully submitted that claims 2-6 and 23-25 are definite and it is therefore respectfully requested that the rejection under 35 U.S.C. § 112, second paragraph be withdrawn.

Turning to the prior art rejections, as a preliminary matter, it is respectfully submitted that the Examiner has unduly burdened Applicant by setting forth multiple rejections that are cumulative in nature. MPEP § 706.02, under the subtitle "Choice of Prior Art; Best Available," requires an Examiner *to confine* a prior art rejection "strictly to the best available art." In the instant case, as just one example, the Examiner rejects claim 1 under § 102 over 5 different references, *while adding a sixth rejection under § 103*. Indeed, in view of the Examiner's apparent inability to determine a "best" rejection, it is respectfully submitted that none of the pending prior art rejections are believed by the Examiner to be strong enough to merit exclusive reliance thereon. If the Examiner maintains the pending rejections, it is respectfully requested that the Examiner

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maintain only those rejections believed most relevant to place the application in better form for appeal by reducing issues.

Moreover, it is respectfully submitted that the Examiner has again simply identified *general* disclosure of the cited prior art without identifying how the cited prior art meets the *specific* limitations recited in the pending claims. That is, the Examiner has merely cut portions of the cited prior art (e.g., Abstract, Detailed Description, Claims, etc.) and pasted them onto the Office Action, effectively quoting the prior art verbatim without the *Examiner's own words* explaining the alleged relevance to the pending claims. In imposing a rejection under 35 U.S.C. §102, the Examiner is required to point to "page and line" wherein an applied reference is perceived to identically disclose each feature of a claimed invention. *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). In the instant case, it is respectfully submitted that the Examiner has failed to point to *any* specific "page and line" of the cited prior art, let alone explain how the "page and line" is perceived to identically disclose *each* feature of the claimed invention.

Nonetheless, it is respectfully submitted that none of the cited prior art, alone or in combination, disclose or suggest the claimed invention. Each of independent claims 1, 5, 6, 8 and 19 embodies detecting a characteristic (e.g., transmitted, scattered, and/or reflected, etc.) of a light which is *traversed by a rising surface of the sample solution* being injected into a sample cell. Support for this amendment can be found, for example, in the last paragraph of page 4 of Applicant's specification. In contrast, each of the cited prior art references appears to disclose only the conventional detection system in which light radiates through the body of a sample solution previously filled in a cell, rather than the light being traversed by a rising surface of the solution.

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Indeed, this distinction marks a fundamental difference between the present invention and cited prior art in that the present invention can verify sample amounts based on the novel calculations that can be derived from detecting a characteristic of a light which is *traversed by a rising surface of the sample solution* being injected into a sample cell (see Figures 1-2 and corresponding disclosure of Applicant's specification). The cited prior art, on the other hand, simply detects light radiated through the body of a sample solution. Indeed, the solutions in the cited prior art appear to be already fully injected into the cell and therefore do not have a rising surface at the time when the light is radiated therethrough, so that the light is not traversed by a rising surface of the solution.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed, either expressly or inherently (noting that "inherency may not be established by probabilities or possibilities", *Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999)), in a single prior art device, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the forgoing, it is submitted that none of the cited prior art anticipates the independent claims, nor any claim dependent thereon. The Examiner is directed to MPEP § 2143.03 under the section entitled "All Claim Limitations Must Be Taught or Suggested", which sets forth the applicable standard for establishing obviousness under § 103:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (citing *In re Royka*, 180 USPQ 580 (CCPA 1974)).

In the instant case, the pending rejection does not "establish *prima facie* obviousness of [the] claimed invention" as recited in the claims because the proposed combination fails the "all the claim limitations" standard required under § 103.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are

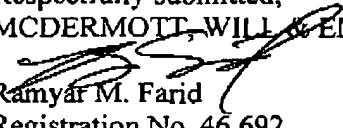
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contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as the independent claims are patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

Based on the foregoing, it is submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejections under 35 U.S.C. § 102/103 be withdrawn.

CONCLUSION

Having fully and completely responded to the Office Action, Applicant submits that all of the claims are now in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below. To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,
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